Title (en)

ARTICULATED ARM TYPE OF INDUSTRIAL ROBOT.

Title (de

INDUSTRIELLER ROBOTER VOM TYP MIT GELENKARM.

Title (fr)

ROBOT INDUSTRIEL DU TYPE A BRAS ARTICULE.

Publication

EP 0143853 A4 19870316 (EN)

Application

EP 84901801 A 19840427

Priority

JP 7495583 A 19830430

Abstract (en)

[origin: WO8404269A1] An articulated arm type of industrial robot has a movable robot body (11) provided on a base (10). The near end portion of an upper arm (13) provided with both a near end portion and a far end portion is pivotally attached to the robot body (11). A forearm (16) provided with a rear end portion and a front end portion is pivotally attached by a point between its rear and front end portions to the far end portion of the upper arm (13). A wrist device (20) is provided with two movable elements (21, 22) which can move with respect to the front end portion of the forearm (16) around, preferably, different axes. The movable elements (21, 22) of the wrist device (20) are rotated around their axes by wrist drive devices (27, 28), respectively. The wrist drive devices (27, 28) are provided with first sprocket wheels (29, 36), respectively, which are rotatably arranged within the rear end portion of the forearm (16). Second sprocket wheels (33, 39) which are linked to the movable elements (21, 22), respectively, of the wrist device (20) are arranged within the front end portion of the forearm (16). The rotations of the first sprocket wheels (29, 36), are transmitted to the corresponding second sprocket wheels (33, 39) by wound connectors (34, 45), respectively. The wound connectors (34, 45) are constituted by endless assemblies composed of chains (46, 47) and rods (48, 49).

IPC 1-7

B25J 9/00

IPC 8 full level

B25J 17/00 (2006.01); B25J 9/10 (2006.01); B25J 17/02 (2006.01)

CPC (source: FP US

B25J 9/1045 (2013.01 - EP US); B25J 17/0258 (2013.01 - EP US); Y10T 74/18832 (2015.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0143853 A1 19850612; EP 0143853 A4 19870316; JP S59201790 A 19841115; US 4637773 A 19870120; WO 8404269 A1 19841108

DOCDB simple family (application)

EP 84901801 A 19840427; JP 7495583 A 19830430; JP 8400218 W 19840427; US 69130184 A 19841231